Remarks

Claims 43-52 and 54 remain in consideration for this application, with claims 43 and 49 being in independent format. Claims 43, 47, 49, and 54 are currently amended. Claims 1-34 have been previously withdrawn and claims 34-42 and 53 are cancelled.

The sequence listing and specification were objected to for failing to comply with the sequence compliance rules. Applicants submit herewith a substitute specification to address these issues and now the sequences in the specification are identified by "SEQ ID NO:" and each sequence in the specification matches the corresponding numbered sequence in the sequence listing. No new matter has been added as a result of the amendments in the substitute specification as all sequences were present in the originally-filed application. Accordingly, Applicants respectfully assert that this objection has been overcome

Claims 43 and 45-47 were rejected under 35 U.S.C. 102(b) in view of Knight et al (Am. J. Human Genetics) ("Knight A"). Applicants have amended the present claims such that they require the use of a conventional FISH protocol, which is different from the FiberFISH protocol employed in Knight A. In a FiberFISH experiment, the chromatin fibers of DNA are stretched, whereas this step is not performed in the presently-amended claims. Accordingly, Applicants assert that this rejection has been overcome.

Claims 44, 48, 49-52, and 54 were rejected under 35 U.S.C. 103(a) as being unpatentable over Knight A in view of Knight (J. of Medical Genetics) ("Knight B"). Applicants assert that the present claims are allowable over this combination for the reasons given above in response to the rejection based on Knight A as Knight A did not

teach or suggest using conventional FISH protocol, but rather used FiberFISH protocols.

The combination of Knight A and Knight B would also result in FiberFISH protocols being used. Accordingly, Applicants assert that this rejection has been overcome.

Claims 43-45, 49, and 51 were rejected for nonstatutory obviousness-type double patenting over claims 1 and 3 of U.S. Patent No. 7,014,997 in view of Knight A. Applicants submit herewith a terminal disclaimer.

In view of the foregoing, it is respectfully submitted that all rejections have been overcome and that the claims as they now stand are patentable over the art of record and a Notice of Allowance appears to be in order and is courteously solicited. Any additional fee due in connection with this amendment should be charged against Deposit Account No. 50-1662.

Respectfully Submitted,

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